

REMARKS

Claims 1-4 and 6-19 are pending in this application. By this Amendment, Applicants amend claims 10, 11 and 19.

The drawings were objected to for containing Japanese characters. Applicants have amended the drawings in the accompanying Request for Approval of Drawing Corrections to remove the Japanese characters therefrom. Accordingly, Applicants respectfully request reconsideration and withdrawal of this objection.

The Examiner's indication that claims 1-4 and 6-9 are allowed, and that claims 11, 13, 16 and 19 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims is greatly appreciated.

Claims 10, 12, 14, 15, 17 and 18 were rejected under 35 U.S.C. 102(e) as being anticipated by Hatanaka (U.S. 6,229,404). This rejection is respectfully traversed.

Claim 10 has been amended to recite:

“A piezoelectric oscillator unit comprising:
a circuit substrate having an oscillatory circuit mounted thereon;
a vibrator package overlaid on said circuit substrate, said vibrator package having a top surface and a bottom surface and housing a piezoelectric member therein and said vibrator package having electrodes provided on the bottom surface thereof which are bonded to electrodes provided on the top surface of said circuit substrate;
a shielding case covering said vibrator package so that said shielding case contains said vibrator package; and
an adhesive arranged between the top surface of said vibrator package and said shielding case to adhere said shielding case to said vibrator package.” (Emphasis added)

In contrast to the present claimed invention, Hatanaka teaches an oscillator including a vibrator/crystal package 2 which is clearly spaced from the metal cover 6. The metal cover 6 of Hatanaka is in no way attached to the vibrator/crystal package 2, and certainly is not adhered to the vibrator/crystal package 2 via adhesive. Thus, Hatanaka clearly fails to teach or suggest “an adhesive arranged between the top surface of said vibrator package and said shielding case to adhere said shielding case to said vibrator package” as recited in claim 10 of the present application.

Accordingly, Applicants respectfully submit that Hatanaka fails to teach or

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suggest the unique combination and arrangement of elements recited in claim 10 of the present application.

Allowable claims 11 and 19 have been amended to be in independent form including all of the features of claim 10 and any intervening claims. Accordingly, Applicants respectfully submit that claims 11 and 19 are allowable as indicated by the Examiner.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claim 10, 11 and 19 are allowable. Claims 12-18 depend upon claims 10 and 11, and are therefore allowable for at least the reasons that claims 10 and 11 are allowable. Additionally, claims 1-4 and 6-9 have been allowed by the Examiner

In view of the foregoing Remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are respectfully solicited.

To the extent necessary, Applicants petition the Commissioner for a one-month extension of time, extending to October 25, 2002, the period for response to the Office Action dated June 25, 2002.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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VERSION WITH MARKINGS SHOWING CHANGES MADE

10. A piezoelectric oscillator unit comprising:
a circuit substrate having an oscillatory circuit mounted thereon;
a vibrator package overlaid on said circuit substrate, said vibrator package
having a top surface and a bottom surface and housing a piezoelectric member therein
and said vibrator package having electrodes provided on the bottom surface thereof
which are bonded to electrodes provided on the top surface of said circuit substrate;
a shielding case covering said vibrator package so that said shielding case
contains said vibrator package; and
an adhesive arranged between the top surface of said vibrator package and said
shielding case to adhere said shielding case to said [circuit substrate] vibrator package.
11. A piezoelectric oscillator unit [according to Claim 10,] comprising:
a circuit substrate having an oscillatory circuit mounted thereon;
a vibrator package overlaid on said circuit substrate, said vibrator package
housing a piezoelectric member therein and said vibrator package having electrodes
provided on the bottom surface thereof which are bonded to electrodes provided on the
top surface of said circuit substrate;
a shielding case covering said vibrator package so that said shielding case
contains said vibrator package; and
an adhesive arranged to adhere said shielding case to said circuit substrate;
wherein said shielding case is provided with protrusions, said circuit substrate is
provided with holes, each of said protrusions is inserted into a corresponding one of
said holes, and said protrusions are fixed in said holes by said adhesive which is filled in
said holes.
19. A piezoelectric oscillator unit [according to Claim 18,] comprising:
a circuit substrate having an oscillatory circuit mounted thereon;

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a vibrator package overlaid on said circuit substrate, said vibrator package housing a piezoelectric member therein and said vibrator package having electrodes provided on the bottom surface thereof which are bonded to electrodes provided on the top surface of said circuit substrate;

a shielding case covering said vibrator package so that said shielding case contains said vibrator package; and

an adhesive arranged to adhere said shielding case to said circuit substrate; wherein the circuit substrate is defined by a multilayer ceramic substrate, and includes a cavity disposed at the approximate center thereof to mount components; said multilayer ceramic substrate includes a wall provided around the cavity; and

said electrodes are provided at four corners of the top surface of the wall, and external electrodes are provided at four corners of the bottom surface of the wall.